Report

To the ILRI Board of Trustees

Tom Randolph

April 2017

CGIAR is a global partnership that unites organizations engaged in research for a food-secure future. The CGIAR Research Program on Livestock provides research-based solutions to help smallholder farmers, pastoralists and agro-pastoralists transition to sustainable, resilient livelihoods and to productive enterprises that will help feed future generations. It aims to increase the productivity and profitability of livestock agri-food systems in sustainable ways, making meat, milk and eggs more available and affordable across the developing world. The Program brings together five core partners: the International Livestock Research Institute (ILRI) with a mandate on livestock; the International Center for Tropical Agriculture (CIAT), which works on forages; the International Center for Research in the Dry Areas (ICARDA), which works on small ruminants and dryland systems; the Swedish University of Agricultural Sciences (SLU) with expertise particularly in animal health and genetics and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) which connects research into development and innovation and scaling processes.

The Program thanks all donors and organizations who globally supported its work through their contributions to the [**CGIAR system**](http://www.cgiar.org/about-us/our-funders/)

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# Closing the Livestock & Fish CRP

The Livestock & Fish CRP was originally planned to be a 12-year program of four 3-year funding cycles, but in the end ran for 5 years on an initial 3-year cycle with a 2-year extension, covering 2012-2016.

# Ending financial situation

The level of Window 1/2 funding for the CRP for 2016 remained largely uncertain until the very end of the year when the major donor contributions were finally revealed. Given that uncertainty, the CRP operated on a relatively conservative 2016 W1/2 budget estimate of $10.3m as indicated in the 2016 Plan of Work & Budget submitted at the beginning of the year. The late commitments were more than anticipated, translating into a total available 2016 W1/2 budget of $14.8m. The last-minute increase in funding was allocated pro-rata to the implementing partners, with a portion used to return the CRP’s 2016 W1/2 operating budget to the originally intended level of $12.9m (which had been the 2015 W1/2 budget), and the remaining portion of $2.7m used to restore the expenditure made from each partner’s reserves in 2015 to compensate for the unanticipated W1/2 budget cuts that had been imposed from late 2014 through 2015. The disbursements were justified by sets of unplanned outputs that were delivered during 2015 and 2016, which demonstrated that the centres had incurred expenditure from their reserves to maintain activities and generate outputs given they had not been able to simply shut down activities with each budget cut. There was clearly a risk of perception that the CRP was ‘dividing up the spoils’ from the late W2 commitments that otherwise should be considered excess funding to be carried over to the 2nd phase CRPs. The CRP management therefore consulted its W2 donors, asking them to endorse the proposed use of the funds. The principle was accepted. The System Management Office initially challenged the decision, but seems to have accepted our explanation that the payments represent reimbursement of previous expenditure rather than distribution of excess carry-over.

Table 1 summarizes annual funding levels over the five year program and highlights the variation that the 1st phase of CRPs has faced, but which was less dramatic for the Livestock & Fish CRP due to its strong W2 funding.

**Table 1. Livestock & Fish CRP planned and executed budget, 2012-2016 (million USD)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Beginning-of-year Budget** | | | **Expenditure** | | |
| **W1/2** | **W3/Bilateral** | **Total** | **W1/2** | **W3/Bilateral** | **Total** |
| 2012 | 10.33 | 11.16 | 21.49 | 8.66 | 8.29 | 16.95 |
| 2013 | 14.20 | 13.37 | 27.57 | 11.39 | 13.06 | 24.44 |
| 2014 | 17.02 | 18.12 | 35.14 | 15.23 | 16.39 | 31.62 |
| 2015 | 11.95 | 20.23 | 32.18 | 14.37 | 14.03 | 28.40 |
| 2016\* | 10.34 | 26.15 | 36.49 | 14.82 | 27.25 | 42.07 |
| TOTAL |  |  |  | 64.47 | 79.02 | 143.48 |

**\***Preliminary expenditure estimates

Table 2 tracks the annual contributions from W1 and from W2 donors.

**Table 2. Window 1/2 contributions to the Livestock & Fish CRP, 2012-2016 (millions USD)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Donor** | **2012** | **2013** | **2014** | **2015** | **2016** | **TOTAL** | **Share** |
| USA | 6.86 |  | 7.84 | 3.92 | 2.94 | 21.56 | 32% |
| Netherlands | 4.21 | 4.21 | 4.21 | 4.21 | 3.68 | 20.53 | 31% |
| Sweden | 5.25 | 3.16 |  |  |  | 8.41 | 13% |
| UK |  |  |  | 1.52 | 3.23 | 4.75 | 7% |
| Australia | 1.57 | 0.41 | 0.64 | 0.64 | 0.61 | 3.86 | 6% |
| Window 1 | 0.72 |  | 1.35 | 1.06 |  | 3.13 | 5% |
| Finland | 1.26 | 0.65 | 0.65 |  |  | 2.56 | 4% |
| New Zealand |  |  | 1.74 |  |  | 1.74 | 3% |
| India | 0.08 |  |  |  |  | 0.08 | 0% |
| TOTAL | 19.95 | 8.43 | 16.44 | 11.35 | 10.46 | 66.63 | 100% |

# Science & Partnership Advisory Committee

The SPAC held its final meeting in December during which they had progress reporting sessions with flagship teams and a joint session with the CRP management committee. Their report, which is generally positive, constructive and demonstrates an improved understanding of the program, is attached.

# 2016 Performance Monitoring Report

The 2016 report will have been circulated for Board review and submitted to the System Management Office on April 18th.

# Self-evaluation

The CRP Management Committee also held its final meeting in December. One session was devoted to a self-evaluation of the program, identifying what worked and what didn’t, first from a programmatic perspective and secondly in terms of management and governance. In many instances, the points raised echoed those already highlighted in the external evaluations, notably with respect to achieving momentum in the target value chains and linking the work there to the research agendas in the other flagships. The CRP’s partnership model was considered healthy and ILRI’s communications support to the CRP, including meeting facilitation and producing a steady stream of blogposts, was highlighted as exemplary by the partners.

# Rehabilitation of the unfunded flagships

In November 2016, the System Council approved the Livestock CRP, but did not approve W1/2 funding for two of its flagships: Feeds & Forages and Livestock Livelihoods & Agri-Food Systems. The exact process for re-submission of revised flagship proposals to allow them to receive W1/2 funding has not yet been formalized, but it seems we will be allowed to submit them in late May for review by the ISPC in June. This will allow enough time to address any final concerns before the System Management Board and System Council meetings later in the year. The revision process is currently ongoing. Following ISPC advice, we are carefully reviewing their earlier comments, and ISPC appears to be willing to clarify our understanding of their comments, if needed.

Eventual approval of the two revised flagships may not, however, translate into increased funding given that current funding is already fully allocated, and there is no indication yet of whether re-allocation of existing funding will be considered and if so, how. This means there may be continued uncertainty about funding we can expect for the CRP in 2018.

# Plan of Work & Budget 2017

Preparing the CRP Plan of Work & Budget (POWB) for 2017 was challenging given the System Council decision to not provide W1/2 funding to two of the flagships with a pro rata cut to the management budget. The POWB was submitted on February 15th. Feedback was provided by the System Management Office indicating where the Livestock CRP management needs to continue to improve the POWB presentation, particularly with respect to formulating the various elements of the Performance Management Framework (outputs, outcomes, milestones, targets) and the narrative so that they are both internally consistent and harmonized across the CRPs. The total budget is nearly 20% higher than in the proposal: the cut in W1/2 funding for the two flagships and management was offset by a number of new W3/bilateral funded projects (Table 3).

**Table 3. Livestock CRP 2017 budget: original proposal version versus POWB, by source (million USD)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | W1/2 | W3/Bilateral | TOTAL |
| CRP Proposal (July 2016) | 20.2 | 23.3 | 43.5 |
| POWB (March 2017) | 14.0 | 37.6 | 51.6 |
| % Change | -31% | +61% | +19% |

It is important to note, however, that the increased bilateral project funding does address the funding gap for the two flagships that are not eligible for W1/2. Specific efforts were made to secure gap funding. Germany responded with $0.5m to support forage breeding work, mainly at CIAT, that has relied on W1/2 funds. Additional project proposals have been fast-tracked

# Financial outlook

There is reasonable confidence that the amount of W1/2 funding from donor commitments for 2017 (based on soft pledging at the last System Council meeting) will match the total budget proposed. However, there is the risk that some CRPs will be oversubscribed in W2 funds and others significantly undersubscribed, and this is currently the subject of discussion at the System level as to the appropriate approach to manage this risk in allocating the W1 funds and to improve the reliability and stability of CRP funding. Livestock CRP and ILRI management currently have little intelligence on donor W2 plans beyond vague assurances from a few donors; the donors are also facing pressures and uncertainty from their own constituencies. The CRP is operating assuming the projected $14.0m W1/2 budget will be funded.

# Independent Steering Committee

A candidate list has been established for members of the Independent Steering Committee (ISC) of the CRP, but the committee has not yet been constituted. There has been continued debate as to whether the ISC is to have an executive function, as was required in the CRP proposal guidance, or to be primarily advisory as many of the CRPs do in practice (cfr. Programme Committee matters arising from the 46th Board meeting), and the System Management Board has now agreed to do a ‘stock-take’ of CRP governance – and especially the role of the ISCs – in light of the reform and restructuring of the System in 2016. The outcome will have important implications for the appropriate profiles of ISC members. At the same time, the number of ISC meetings has been reduced from two to one in 2017 to accommodate the W1/2 budget cut, so there has been less pressure to have the ISC immediately in place. Their inaugural meeting will be held in August-September to provide feedback on work planning for 2018. This list of candidates under consideration includes those provided from the Board’s own list as recommended at the last Board meeting. The final list will be recommended to the Board for approval by the end of May.

# Partnership

The Livestock CRP now includes two non-CGIAR implementing partners, the Swedish University of Agricultural Sciences (SLU) and GIZ, and attention is being given to defining the modalities to enable their full participation. Academic partners of CRPs have found the CGIAR funding arrangements difficult to accommodate, and we are exploring strategies to address this challenge.

# Monitoring & Evaluation

Progress has been made in responding to the recommendations from the Independent External Evaluation (IEE) of the Livestock & Fish CRP to strengthen the CRP research management and monitoring & evaluation (M&E) systems. As reported at the last meeting, the Livestock & Fish CRP joined an initiative with four other CRPs led by CIAT – which has now expanded to eight CRPs – to develop a second generation version of their online CRP planning and reporting program called MARLO (Managing Agricultural Research for Learning and Outcomes). The planning module is now ready for use by the Livestock CRP and is being rolled out this coming month.

Following up the item from the Programme Committee matters arising from the last Board meeting on the CRP financial report system under development, the CRP engaged with the OCS developers at both ILRI and System level. The project to develop a CRP financial aggregation platform to enable reporting real-time CRP budget and expenditure information has been reformulated as a two-step project and described in an OCS System Design Document. The project is underway.

A Performance and Partnership Manager position has been created for rolling out the M&E system that was developed over the final year of the Livestock & Fish CRP. The position will also be responsible for strengthening the focus country teams and coordinating the CRP engagement in the CGIAR Country Collaboration initiative. This is important since it is anticipated that much of the M&E will be in the focus countries implemented by the country teams and may be expected to also contribute to or integrate within CGIAR Country Collaboration efforts.

**ANNEX: Final report of the L&F CRP Science & Partnership Advisory Committee**

**Report from the SPAC meeting**

**December 6-8, 2016**

**Executive Summary:** The SPAC conducted its last meeting to review and advise the CRP3.7 project.SPAC members in attendance included Max Rothschild (Chair), Martin Webber, Rohana Subasinghe and Maureen Miruka (partial participation) and Andy Peters (by internet). In preparation for the meeting the SPAC received summaries relative to the CRP3.7 activities, research and value chains; and during the meetings, discussed these with CRP leaders. The SPAC met for two days reviewing the Flagships and value chain activities. Prior to the official meeting, a subset of the SPAC members (Max Rothschild and Martin Webber) arrived a day early and met with some of the ILRI leaders.

The SPAC continues to express strong support for the concept of this program and the progress made, especially in the last 12 months. We have visited or interacted to date with four value chains (small ruminant in Ethiopia, dairy in Tanzania, pigs in Uganda and fish in Egypt) and there has been a review of pigs in Vietnam. The concept of Flagship research which would have specific impact on these value chains is highly valued by the SPAC. Now at the end of this phase of the CRP, progress in the Flagships and the value chains, while initially slow in many aspects, has at the end of this period been more clearly demonstrated. The initiation of synthesis events, while not completed, appears to have been very useful and management should be sure to complete these reports. Specific observations and points of advice is provided at the end of this report.

The SPAC expresses its very sincere appreciation to Tom Randolph, the PPMC, Katie Hamilton, Esther Ndungu and their colleagues for all their work to make this meeting and our involvement useful. The SPAC appreciated the involvement of DG Jimmy Smith in the meetings.

Our review and comments are given under the following topics:

* Progress in 2016 made in the Flagships and Value Chains
* Our feedback from review and lessons learned
* SPAC’s reflections on L&F model for AR4D

**Progress in 2016 in the Flagships and Value Chains**

**Animal Health (AH)**

The animal health report and presentation were concise and well presented. The early SPAC view of the AH flagship was that there was a disconnect between the legacy research carried out in Nairobi and the animal health needs of the VCs. It has been encouraging to see that this has been addressed largely through the appointment of Barbara Wieland as epidemiologist who appears to have led the field initiatives in disease investigation, surveillance and planning of interventions in several of the VCs.

The division of the Flagship into 4 clusters, Assessment, Interventions, Diagnostics and Vaccines, and AH service delivery has been a logical and well thought out innovation. There has been significant progress in Assessment, for example in the Vietnamese, and Ugandan pig VCs, Tanzanian dairy, Ethiopian small ruminants and Egyptian fish, amongst others. There has also been an assessment of gender constraints in AH. In particular it is encouraging to see some results beginning to emerge in fish health. Attention has also been paid to Interventions by developing tools and training possible participants although it is too early to evaluate any impact. For Diagnostics and Vaccines, work has continued on ECF vaccine, ASF antigens and a CCPP experimental infection model has been developed. Also a new lateral flow CBPP diagnostic kit has been transferred to a commercial diagnostic company. In terms of service delivery there has been progress in hatching shrimp seed, vaccination against PPR in Mali and delivery of ECF ITM vaccine in Tanzania amongst other projects.

The AH team held a synthesis workshop in November, during which they critically examined what went well, challenges faced, limitations etc. together with thinking about challenges for the future.

There was discussion about the balance between the upstream versus downstream research effort and how to balance resources and how to move from pilot scale to full scale where interventions are concerned. It was agreed that partnerships are important at all levels and it was clear that their success would determine the success or otherwise of the overall outcome. It is noted that the animal health industry is beginning to take more interest in sub-Saharan Africa and other LMICs as important future markets and it is suggested that every effort should be made to leverage and encourage this so that they will invest in appropriate animal health solutions, thus creating sustainability.

Overall the SPAC was pleased with the progress made by the AH Flagship and recommends that the momentum in all 4 clusters should be maintained in the next phase of the CRP.

**Genetics**

This Flagship’s primary goals were to develop and use improved breeds and strains of livestock and fish that can perform in a range of farming systems and in challenging and changing environments to improve food production and livelihoods for and by the poor. Primary activities were devoted to identifying both traits of importance to small holders but also differences among breeds and strains of livestock and fish. This Flagship collaborates most closely with the Animal Health and Feeds Flagships and operates extensively in most of the 8 value chains. The clusters were defined as 1) Systems, Strategy, and Genome Assessment, 2) Improved Breeds and Strains, 3) Delivery and Use Systems and 4) Breakthrough Technologies and Information Systems.

Progress and achievements reported in 2016 as reviewed in the reports and the presentation were considerable. Under Cluster 1, genome assessments were carried out in the pig value chain in Vietnam, and sheep and goats in the Ethiopian value chain. Additionally, outside the value chains, research in this cluster was carried out in several other species and locations. In particular, the influx of bilateral funding for the African Chicken Genetic Gains (ACGG) program and the African Dairy Genetic Gains (ADGG) from the Bill and Melinda Gates Foundation (BMGF) allowed the addition of genomic and phenotypic evaluation of African chickens to the work of the Genetics Flagship and more extensive evaluation of dairy cattle genomics in the Tanzania value chain. In Cluster 2 extensive activities in breed preference in Senegal were carried out and with considerable attention paid to gender issues. Community Based Breeding Programs (CBBP) were also examined and supported for the small ruminant value chain efforts in Ethiopia and other small ruminant work in Kenya and dual purpose cattle in Nicaragua. These projects all had gender components. In Cluster 3 delivery of genetics was well demonstrated through the various CBBPs, improved health programs or new reproductive technologies. Advances in reproductive technology research and transgenic technologies also were reported. The partnership in the Centre for Tropical Genetics and Health (CTLGH) has also helped to expand the data depository for information related to diseases and combined with information from the ILRI biorepository offers the opportunity for excellent future research.

Genetic Flagship research results are included in most of the value chains, with particular progress made with fish genetics in Egypt, dairy cattle in Tanzania and small ruminants in Ethiopia. Genetics research with pigs in Vietnam and Uganda and cattle in India while having begun to increase in 2016 lags behind that of the more successful value chains.

Collaborations with the other Flagships particularly Animal Health are of note. The possible identification of animals resistant to ECF is a good demonstration of possible upstream research having large effects on downstream value chain activities.

A synthesis activity for this Flagship was begun. Clearly this activity will be of significant value to this Flagship when completed as they need to all consider what has been accomplished and how to move forward. The lack of personnel to effectively deliver on projects, in particular on the side of ILRI, where the genetics team currently has no post-docs or junior scientists to support more senior staff, needs to be remedied. Typical research outputs, including publications, and tools and repositories, have increased greatly and are evidence of significant accomplishments.

**Feeds and Forages**

The Feeds and Forages Flagship is designed with the objective of creating superior feed and forage strategies responding to actual and evolving demands for meat, milk and fish production and design and implementation of equitable feed value chains with reduced ecological footprints. The broader objectives of the Flagship are to: (a) reduce feed costs relative to what farmers get for their produce, (b) provide feed resources to facilitate increase livestock and fish production and productivity, (c) increase income and livelihoods from feed/forage value chains and reduce labour/drudgery from feed resourcing and feeding, and (d) reduce environmental impacts from feed resourcing.

Over the past year this Flagship has developed several strategic partnerships for both downstream research and delivery, with an outreach of over half a million farmers in India. A range of scientific research outputs have also been generated in 2016 owing to these strong partnerships. A worthy mention is the technology of turning an environmentally hazardous waste product, cassava peels, into high quality feed stuffs for ruminants and monogastrics, and its ‘up-take’ by several private sector enterprises in Nigeria.

Under the three clusters of the Flagship, several activities have been conducted in considerable detail, although upstream research has been somewhat limited. Downstream research leading to knowledge and capacity development at ground level has been substantial with significant impact, however, effective integration with value chains requires further effort.

The number of Feeds and Forages Flagship sites appears high (eleven countries), and with the cessation of W1 and W2 funding for this Flagship in the 2017 phase 2 of the livestock CRP, continuation of the work towards achieving the original objectives, conducting more upstream research, outreaching findings at field level, and integration of those into ongoing value chains, in all sites, will certainly be a challenge. Although a planned prioritization of activities has been proposed, it may require further thinking and analysis based on the level of resources will become available.

**Systems Analysis for Sustainable Innovation (SASI)/ Value Chain Transformation and Scaling Flagship (VCTS)**

The value chain narrative, as observed from both the individual value chain reporting and the flagship reporting, has matured (evolved) substantially over the last year. Most of the value chains demonstrated extensive collaboration with the flagships. They are applying science, and in some cases beginning to achieve take-up of the science. Assessment outcomes, especially of ex-ante assessments, are seen to be very useful. VCTS’ main contributions tend to be early in the individual value chain process and in training/capacity building. SASI’s contributions are becoming evident.

The value chains appear to vary substantially in terms of their level of linkage with upstream research, however. Bangladesh, Egypt, Ethiopia, Tanzania and Uganda were all strong in such linkages; India and Nicaragua were weak.

Gender themes and perspectives are being integrated to a much greater degree than before in the value chains. The Vietnam, Egypt and Ethiopia value chains are notable in this respect.

Much of the value chain reporting has a very strong “development” focus. This forms a superb narrative in some cases – Egypt, Tanzania and Uganda for example - in terms of describing mechanisms for achieving development outcomes. Less apparent is how well the upstream or applied research has contributed to (or been driven by) the development achievements.

Also unclear is where the CRP’s role and activities lie within the value chains. The CRP is clearly contributing to basic approaches, to data analysis and ongoing proof and choices, and to several tools that are important to value chain success. Not fully described is the level of involvement of CRP resources in downstream take-up and application. What is the appropriate level of such involvement?

This line of enquiry suggests a question of how well the CRP role within the value chain collaboration (with bilateral projects, etc.) is defined or delimited. We raise the question of whether there is risk of CRP resources being drawn into downstream development activities for which CRP has limited expertise or resources, or which, simply, should be in the purview of the development experts. This is not to say that we see egregious missteps in this respect at this point. We just raise this concern as a yellow flag.

The value chain reporting this year is revolutionary in describing the substantial, evolving themes of business models and linkages, downstream market pull, and producer/ association/trader linkages with larger downstream actors. It seems that there is growing awareness amongst the value chain teams that local market forces are insufficient to motivate take-up of new approaches and science. This is a normal development evolution and so is not surprising; however, its presence in the flagship and value chain dialogue is noticeably different this year. A related question, then, is how CRP resources and staffing should be contributing to understanding and implementing these business and market themes. If CRP should be doing so, it will need to engage experts who deeply understand them. ILRI is establishing a strategic partnership with GIZ which is intended to focus on these areas.

The flagships and value chains have done a commendable (and much improved job) this year in presenting their achievements in terms of written articles and other outcomes, and of course these are substantially linked to value chain experiences. The Egypt value chain reporting does an especially good job of linking its publication accomplishments to its value chain implementation. It would be helpful to see a similar list of research publications corresponding to each of the value chains. (As noted, some have done so.)

The VCTS written report was a rather general document, with few specifics that are helpful to understanding the CRP progress.

Two synthesis reports are being prepared that should be very informative. (The process of preparing these reports was said to be extremely useful in terms of sharing ideas and developing collaboration amongst flagship and value chain interests.) The topics are:

* ‘Taking Stock of Livestock & Fish experience with value chain transformation: an interdisciplinary process’ (led by An Notenbaert)
* ‘Institutional arrangements in facilitating improved performance of livestock and aquaculture value chains’ (led by Isabelle Baltenweck)

Frequently noted, progress and success in the value chains was very much a function of the availability of sound bilateral and other partnerships, providing a substantial programmatic framework and resources for development. Tanzania, Egypt and Ethiopia are strong in this respect. Other country value chain initiatives were able to take advantage of established legacy work to make progress (e.g. Bangladesh, Egypt). The Vietnam value chain has struggled with its lack of bilateral collaboration. Egypt, Ethiopia, Bangladesh, Nicaragua, Tanzania and Uganda stood out in terms of the depth of their reporting, and in their data collection, analysis, use of tools and linkages with flagships. Some initiatives (e.g. Uganda) seem to have had success in attracting new funding, even if initial funding base was low. Nicaragua was new to SPAC, as it had not been substantially reported on before this year. CRP’s research contributions in Nicaragua were unclear.

**Gender Issues in the Flagships**

Comments on each of the flagships relative to gender are discussed below.

**Animal Health:** The SPAC noted that more gender and social science integration was seen, especially in Clusters 1 and 2, from field implementation, analysis (knowledge attitude and practices of farmers) and publications. This was mostly from work in Ethiopia. There was under-reporting of gender work, especially from Uganda and Tanzania.  SPAC recommends better focus on gender data analysis and reporting going forward, and having that capacity in, or partnering with organizations that can bring that expertise or with VCTS and SASI.

**Genetics and Breeding:** Very clear reporting overall was noted. The reporting began by identifying *men and women* clearly as beneficiaries of this work and identified roles of key players in the value chain and especially considered consumers as key to their activities and this was carried out through the entire report. Partnerships with VCTS and SASI, as well as the role of research for development in understanding Impact Pathways, were outlined as well as a clear focus of gender and role of gender scientists and that of different types of partners and their value-add. There was a lot of evidence of gendered data collection and participatory implementation, analysis and reporting and publication in the Vietnam work under Clusters 1, 2 and 3, including a very important dimension on Institutional Gender Integration in mainstreaming - staff, enumerators and trainees. In addition work in Somalia discussing gender was noted.

**Feeds and Forages:** Aside from a publication from Bangladesh on the gendered nature of the fish sector, and the study in Tanzania, there is not much else on gender integration and analysis discussed in this Flagship. The work on forages for pig feeding is participatory but doesn’t take into consideration the gender dimension. Reporting for the entire Flagship is very gender blind and it is not clear if any work was undertaken that was not reported. Feeds and Forages should have a clear focus on gender, especially with regards to labor issues at household level directly influencing uptake and adoption of technologies, and at value chain development level. Such efforts are encouraged in future.

**SASI:** There was avery clear reporting structure for this Flagship. Clarity on partners and their role and specificity was expressed and goes to show the importance of having the right partnerships around gender and social analysis. The partnership with KIT has grown and has had a cross-cutting impact in many value chains, flagships and centers. There was a systematic and detailed focus on gender, from data and its impact, e.g. women’s issues in fish in Bangladesh and use of analysis results in Nicaragua; and great impact-focused publications. There was clear evidence of usage of tools for gender analysis and dissemination pathways for gendered research outputs. There is need to ensure this kind of effort is reflected and reported in the other Flagships and value chains. The nutrition dimension is new and refreshing in its focus on behavior change and on impact of work on poorer segments of the population. This could be analyzed further on access of ASFs for undernourished people and ensuring that this is gendered as household members have varying nutrition needs e.g. children/pregnant and lactating mothers. The focus on integrated gender research should be seen throughout, to value chain transformation and upgrading; as well as NRM - just as in the other flagships. Lastly, a focus on monitoring with some progress and planning will be useful in helping to clarify gender issues and progress made. Resource allocation to MLE is going to be key in tracking outcomes and impacts of interventions as there is more pressure to undertake research for development and showcase those outcomes. The same will apply for gender budgeting.

**VCTS:** The structure of this report was hard to follow. There was very limited demonstration of gender in this Flagship, disappointingly so since there is so much to report on. A few examples, such as the Bangladesh fish value chain, show the potential, but even this value chain does not go in-depth even where gender issues were mentioned. It focuses mostly on the publications and not impact - and this is a clear demonstration of the need for MLE to capture actual development impacts. This Flagship and related activities in future should go further to demonstrate how it has integrated gender analysis and other socio-economic characteristics in its design and how these variables might impact and benefit the participation of men and women. For instance, for the Bangladesh value chain, there should be build up on the analysis of gender ownership of fishponds, emerging gender issues in fish value chain, multi-dimensional barriers in technology uptake by women etc. The India and Vietnam value chains’ work was also gender blind as reported.

SPAC encourages that future activities ensure gender is integrated into the design, implementation, MLE and other activities of the Flagships as a whole.

**Feedback from this SPAC review and lessons learned**

* 1. **Substantial Progress.** SPAC is very pleased to note the very substantial progress that the L&F CRP has made in both upstream and downstream implementation, and in its internal operational synergies. Several value chains are demonstrating progress, including take-up of research, growing value chain linkages, and scale up of approaches and research.
  2. **More substantial outcomes.** CRP outputs, in terms of applied research and methodologies, have stepped up in several countries. Upstream research is more clearly engaged with the value chain.
  3. **Increased interaction.** Flagships and value chains appear to be much more interactive, and the nature of their collaborations is much more clearly described.
  4. **Improved reporting.** SPAC appreciates that the Flagship and Value chain reporting are both much clearer in explaining activities, value chain linkages, flagship-value chain interactions, and outcomes. It may be that this additional clarity is helping SPAC to recognize the accomplishments described in 1—3 above.
  5. **Greater involvement with business.** Value chains are much more involved with private sector (business actors), including traders, service/inputs providers and downstream enterprises. These linkages are implementing business models, providing market pull, and providing the basis for take-up and scale-up beyond the community level, and should be continued and strengthened.
  6. **Gender themes are incorporated.** Gender themes are significantly better and more extensively incorporated in all elements of the CRP especially in the genetics & forages; SASI flagships. There is still a focus on publications rather than real impact as a result of lack of MLE through the flagship from the beginning. Some issues on funding could be addressed by ability to show real impact. We recommend resourcing gender and MLE in both staffing and actual research and dissemination. Partnerships with relevant development organizations will play a key role with gender and M&E.
  7. **Influx and impact of bilateral dollars.** While it is clear that the CRP is underfunded and hence requires considerable bilateral funding, this may come “with a price”.
* Small grants should be avoided due to management costs and very large ones should be taken only if they play a role in the CRP and do not misdirect it.
* The CRP is required to “buy into” the bilateral funder’s agenda. This may not be fully in synchrony with the L&F’s ToC, or with its partners’ mandates as upstream research institutions. Care should be taken to evaluate such decisions.
* The CRP is required to work within the bilateral’s timeline. This is typically of shorter term (even as short as 3 years) that the CRP’s requirements, putting further pressure on CRPs’ research agenda and achievement of the ToC.
* Bilaterals have agendas that emphasize development rather research. This puts pressure on CRP to adopt a development focus (versus a research focus).

The combined impact of this linkage with bilateral initiatives may be to diminish the focus of research in the CRP’s (and institutes’) agenda. To guard against this, SPAC recommends that CRP carefully work with prospective bilateral partners / financiers to craft roles for the CRP that are consistent with the CRPs ToCs, research mandates, and competitive advantage in research.

* 1. **Synthesis events have great value.** The Flagships and Value Chains repeatedly commented on the value of the synthesis events that have taken place since September. These events have added value in terms of clarifying Flagship roles with the CRP, the desired collaborative linkages between value chains and flagships, accomplishments and objectives. The synthesis events were absolutely vital as a wind-up to Phase 1, especially in the absence of Monitoring, Evaluation or Impact information/data.

We recommend that synthesis events be implemented frequently during the Phase 2 CRP, side-by-side with monitoring activities. We recommend that formal writeshop-style events take place at least every 2 years, with other less-formal events held twice-yearly.

* 1. **The collaborating Institutes, and CRP itself, should not try to do too much if financial or personnel resources are not available.** If resources are not available, internally or from partners, then the activities – including excess value chain - should be postponed or dropped.
  2. **Needed staff resources.** The absence of personnel needed for CRP implementation has been constantly mentioned by the Flagships and Value Chains over the last 4 years. This has been a terrible drag on CRP implementation. Some personnel requirements were not fully recognized at the outset – for example personnel with practical value chain expertise and business expertise. SPAC recommends that the CRP ensures that the right personnel are engaged at the outset of Phase 2. If CRP has difficulty in engaging these personnel, the alternative may be to (a) confide responsibilities to partner organizations that possess the expertise or (b) to cut back on the CRP activities by suspending or dropping activities for which it lacks proper personnel capacity.
  3. **A functioning monitoring and evaluation system needs to be in place for Phase 2 from the outset.** SPAC (and many others) have continuously noted the need for M&E, which was not able to be implemented during Phase 1. The M&E should be closely linked to the Theory of Change, and basis should include intermediate indicators that can credibly demonstrate progress on an ongoing towards achieving CRP outcomes. The M&E system should provide impact data. Success stories will also be useful. Ongoing CRP results should be well-communicated internally and to external to CRP stakeholders, and especially to bilaterals and other program funders.
  4. **Partnership issues.**  CRP has established numerous implementation partnerships and have already established a handful of “strategic” partnerships. Given the information supplied in some cases SPAC did not have sufficient information to comment on the wisdom or quality of these partnerships. However, we wish to affirm the principle of strategic partnerships in areas that are important to the CRP and that are not areas of strength (or priority) of the collaborating institutes.

**Our reflections on SPAC role and lessons learned**

1. On balance the expected outputs requested of SPAC have been well-described and reasonable. However, changes in the terms of reference during the CRP time period tended to be disruptive and counterproductive. For instance, partnerships were an integral part of our SPAC TOR but we never got clear advice on what aspects of partnerships we were to advise on.
2. In-person meetings between the management team and SPAC member and among flagship leaders and scientists with the SPAC are very desirable, and SPAC suggests that these should take place twice a year.  Additional virtual meetings also have value and should be consider to increase dialog and help to exchange ideas.
3. Reports to the SPAC should be brief and should attempt to synthesize all aspects of progress for the year and for the overall project to date.
4. Reports by the SPAC or any advisory board should be considered carefully. While some organizations may require responses to reviews, we recommend that this be an internal operation and not involve advisory board members, except where additional explanation or clarity would be helpful.  Back-and-forth responses complicate matters and create an atmosphere of tension that is not conducive to honest and constructive review.
5. For SPAC or any advisory committee, choice of members of the committee should take into account the level of duties required and the ability of the individual to commit the time required for meetings and activities. Furthermore, while expertise in one subject matter may be required, the ability to synthesize a wide range of topics is also needed.
6. SPAC has appreciated the greater involvement of the CRP management team and of the DG. This should be encouraged for future activities.

**SPAC’s reflections on L&F model for AR4D**

1. The combined Livestock and Fish (L&F) model CRP was created with the idea of harnessing synergy and improving efficiency in implementation and delivery. It was clear that early on the teams had difficulty in making this work but it has been noticeable lately that the combined effort has started to pay off, particularly in the genetics and animal health areas.
2. A major tension from the outset of the CRP (and we gather also in the other CRPs) has been the balance between research and development, and further, between basic and more applied research.  At the root of this has been the stated objective of the CRP 3.7 *to deliver more milk, meat and fish to the poor by the poor,* and in order to make this happen, functional linkages between flagship research and the value chains must exist. ILRI is a research organization and does not claim to do development work, apart from the new thinking of creating an independent *Impact at Scale* programme. Also ILRI had a long term legacy program of research in animal health in particular which was not necessarily directly applicable to the day to day problems of the value chains. Thus there was clearly an applied research / development gap at the level of the value chains.  This is an issue that the SPAC has repeatedly drawn attention to and, in fairness, the CRP has attempted to address it, by seeking to investigate and address issues much closer to the everyday needs of the value chains.
3. As a research institute, the key output of ILRI has predominantly been research publications, and not on-the-ground impact. With the CRP some transition from primarily publications to a combination of publications and impact has occurred. However, donors are increasingly demanding more evidence of impact, which necessitates objective measurement, i.e. M&E and impact assessment.  This has made it difficult for SPAC to do a peer review progress of the CRP’s overarching goal of *more milk*…. . Future advisory groups will need more information to be helpful in this regard. On discussion with the PPMC it is clear that these issues are well understood and generic across the CG and CRPs.
4. As an example of more downstream research needs, we saw the later addition of fish health to the L&F research agenda as potentially addressing a very obvious gap in researching important causes of productivity losses in fish as well as in livestock.  For example, the investigation of summer mortality in tilapia in Egypt and its possible linkage with Tilapia Lake Virus is valuable work. Through this linkage, ILRI was able to provide necessary veterinary and diagnostic capacity to WorldFish for the case investigation.
5. While we appreciate the rationale for the future separation of fish from livestock (or vice versa) in order to give the Fish-related themes and value chains a higher profile, the downside is that the valuable research linkages could be discarded.  We still think that there is a lot to be gained by the continued collaboration of the two sectors, as both have similar humanitarian goals. In other words, the institutional collaboration that has been achieved should be continued and strengthened as it is considered that this was beginning to pay off.

**Conclusions:** The SPAC is happy to receive questions concerning our review and advice. We wish the new advisory team and members of the CRP good luck and success.